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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,841	09/15/2003	Kenneth R. Schmidt	GP-303099	1190

7590 01/12/2006

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EXAMINER

KERNS, KEVIN P

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 01/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/662,841

Applicant(s)

SCHMIDT ET AL.

Examiner

Kevin P. Kerns

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005 and 06 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-15, 19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6, 8, 9, 12, 15, 19, 21 and 24 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 10, 11, 13, 14, 22 and 23 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3, 7, 10, 11, 13, 14, 22, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bertels (US 3,202,793) in view of Wang et al. (US 6,373,021).

Bertels discloses a process and member for joining by welding light metals with steel, in which the process and member includes welding a metal sheet (steel plate 9, which has a planar surface on its side to be welded) to an edge of a metal bridging patch (zinc-plated strip member 10), with the strip 10 being welded on its other edge to an aluminum tube 8, such that the welds are fillet welds (12,13) accomplished in a conventional manner, including arc welding, for example (column 1, lines 11-13 and 59-

72; column 2, lines 1-22; and Figures 1 and 2). Although Bertels does not specifically disclose the use of spot welding, drawn arc welding, or a tube thickness, one of ordinary skill in the art would have recognized that selection of an optimum tube thickness would provide sufficient heat transfer properties while providing sufficient strength and rigidity to the structure. Furthermore, Bertels discloses "a conventional manner, e.g. by arc welding", but one of ordinary skill in the art would have recognized that other welding techniques, including spot welding and drawn arc welding, would have been obvious to the welding artisan, with selection of the welding technique being dependent on materials and/or dimensions of the workpieces to be welded. Bertels does not disclose that the process and member being welded includes welding of a metal sheet to a major side (rather than an edge) of a bridging patch.

However, Wang et al. disclose a method of welding that includes the steps of providing respective major sides of first and second hydroformed conductive workpieces (10,12), one of which is tubular, and the other (major side of a flat sheet) includes a plurality of spot welding projections (28a-28d); contacting a portion of the workpieces (10,12) together; and conducting electricity between the workpieces (10,12) through the projections (circular protrusions 28a-28d) via a pair of electrodes (44,46), such that a roof panel of a vehicle (Figure 4) is formed as a final product, with welding of a metal sheet to a major side (rather than an edge) of a bridging patch being advantageous for obtaining an automotive vehicle structure with improved control over weld nugget formation, reduced energy consumption, and prolonged electrode life (abstract; column 1, lines 29-46; column 2, lines 6-67; column 3, lines 1-30; and Figures 1-4).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the process and member for joining by welding light metals with steel, as disclosed by Bertels, by welding of a metal sheet to a major side of a bridging patch, as taught by Wang et al., in order to obtain an automotive vehicle structure with improved control over weld nugget formation, reduced energy consumption, and prolonged electrode life (Wang et al.; column 1, lines 29-46).

Allowable Subject Matter

4. Claims 6, 8, 9, 12, 15, 19, 21, and 24 are allowed.
5. The following is a statement of reasons for the indication of allowable subject matter: the reasons for indicating allowable subject matter for independent claims 6, 8, 12, 15, and 24 are unchanged from those indicated in the prior Office Actions. However, the additional prior art necessitates a new ground of rejection for dependent claim 14, which was previously indicated as allowable subject matter.

Response to Arguments

6. The examiner acknowledges the applicants' after final amendment provided with the request for continued examination, which were received by the USPTO on October 27, 2005 and December 6, 2005, respectively. The amendment overcomes the prior objection to claim 1. The applicants have cancelled claim 25. Claims 1-3, 6-15, 19, and 21-24 are currently under consideration in the application.

7. Applicants' arguments with respect to claims 1-3, 7, 10, 11, 13, 14, 22, and 23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin P. Kerns *Kevin Kerns 12/20/05*
Primary Examiner
Art Unit 1725

KPK
kpk
December 20, 2005